

Amendments to the Claims:

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 19 (Canceled).

Claim 20 (Currently Amended): A thermo-hydrodynamic force amplifier in which a liquid is displaced between a hot region (14) and a cold region (16) within a rigid cylinder (13) by means of a drive-actuated displacer piston (11) through conduits of a heater-regenerator-cooler arrangement (14, 15, 16) or of a heater-recuperator-cooler arrangement so that the liquid cyclically contracts and expands, thereby providing output work which in each cycle is greater than an input work (12) at the displacer piston (11), wherein the liquid in the arrangement (14, 15, 16) is cyclically displaced in alternating flow directions in a circuit, which comprises in its circuit path the arrangement (14, 15, 16) and the displacer piston (11) in the rigid cylinder, the liquid producing the output work at a separate machine (18, 33), the separate machine being a second thermo-hydrodynamic force amplifier, with the features as described above, the first thermo-

hydrodynamic force amplifier and the separate machine in the form of the second thermo-hydrodynamic force amplifier being coupled in such a manner that the linear work production of the cyclically expanding liquid of the first thermo-hydrodynamic force amplifier is directly coupled into the second thermo-hydrodynamic force amplifier.

Claim 21 (Previously Presented): The force amplifier as set forth in claim 20, wherein the liquid produces the output work during expansion, being thereby expanded to atmospheric pressure (P_0) or to a slightly higher pressure, and wherein the liquid is then returned to an initial state in the cycle by being caused to contract by a reversible cooling process.

Claim 22 (Previously Presented): The force amplifier as set forth in claim 20, wherein a switchable shut-off element (17) by means of which the pressure generated by the expanding column of liquid may be regulated both in terms of time and quantity.

Claim 23 (Previously Presented): The force amplifier as set forth in claim 20, having a working frequency that is clearly below 1 Hz.

Claim 24 (Previously Presented): The force amplifier as set forth in claim 20, wherein the separate machine (18, 33) is coupled to the output (30) of the force amplifier in such a manner that the linear work production of the cyclically expanding liquid is directly coupled into the separate machine, said separate machine (18, 33) being a linear motion energy converter.

Claim 25 (Previously Presented): The force amplifier as set forth in claim 20, wherein the separate machine (18, 33) is coupled to the force amplifier through a force balancer (30) and a pressure coupling (33a) and acts as a refrigerator-heat pump.

Claim 26 (Previously Presented): The force amplifier as set forth in claim 20, wherein the separate machine is a hydraulic engine (18) through which the thermally expanding liquid flows cyclically so that rotational energy (19) is generated at a shaft of the hydraulic engine.

Claim 27 (Previously Presented): The force amplifier as set forth in claim 26, wherein the liquid that cyclically expands and contracts is concurrently used as a hydraulic liquid by the hydraulic engine (18).

Claim 28 (Previously Presented): The force amplifier as set forth in claim 26, wherein an expansion tank (20) that is pressurized to atmospheric pressure (P_0) or to a slightly elevated pressure is mounted downstream of the hydraulic engine (18).